	Tool	
w/ CALFED	Consistent	
support	Stakeholder	
Potential	eholder Assurances	
of funding	Availability	
	Cost	
ability	Implement	
Frame	Time	
potential	Mitigation	

		Annual State of State	
Market acquisition of water/incentives			
Purchase reduced demand			
Long-term deals for long term water purch.			
Long-term deals for short term options			
Short-term purchase program	.,		
Project water purchases			
Purchase USBR 215 water			
Purchase DWR interruptible water			
Purchase turnback water			
Purchase releases from hydro producers			
Time-based pricing			
Incentives for GW banking and exchange			
Acquisition of level 4 refuges supplies			
for banking			
Increased usage of Colorado R. water			
via conj. use or financial incentives			
Upstream purchases			
(w/ or w/o operational shifts)			

July 17, 1998

Tool	Consistent w/ CALFED	Stakeholder support	Assurances Potential	Availability of funding	Cost	Implement ability	Time Frame	Mitigation potential
New and reoperated storage								
Delta Wetlands		1		7[1			
Los Vaqueros				1	 		 	
Madera Ranch			-	1				
Kern Waterbank: Reschedule SWP deliveries								

Madera Ranch		1	1	i			
Kern Waterbank:	7						
Reschedule SWP deliveries						1	
Pre-deliver to groundwater			1				
MWD GW banking / conj. use with local	7						
Districts							
Alameda Co. GW banking / conj. use					T		
Semitropic expansion	7						
Mendota Pool pumping shifts						<u> </u>	
Raise Friant Dam						<u></u>	
Raise Shasta Dam							
San Luis Reservoir (re-operation)							
Pine Flat companion reservoir							
Contra Costa GW banking/conj. use							
Expansion of Pacheco Res.							
CCSF / SCVWD Exchanges							
Removal of reservoirs/dams			······································		†	 	
EBMUD Exchanges							
Amer. Riv. to SSJID/OID							
Amer. Riv. to Mok. Riv.		[[
Gravelly Ford Project (?)			•				

Tool	Consistent	Stakeholder	Assurances	Availability	Cost	Implement	Time	Mitigation
	w/ CALFED	support	Potential	of funding		l . :	Frame	potential

Modification of operating patterns

					· ·			
South Delta facilities (new screened intake				1				
with 5,000 to 7,000 cfs capacity at CCFB)			1		i			
Relax Banks pumping limits								
JPOD (ref. SWRCB alternatives)				 				
Expansion of flexible operations								
Exchanges not using Ops Group								
- unbalanced exchanges			ł	<u> </u>			ł	
Exchanges for water quality								
Reschedule water or shifting to GW to								
get past low point in San Luis] [}]	
Real-time operations with crediting	1						1	
(adaptive exports limits)					1			
Friant-Kern/ Calif. Aqueduct intertie								
Exchanges involving the Cross Valley Canal				il				
DMC / Calif. Aqueduct intertie	+ (o)		+	0	\$12-15M, \$20/AF		+	+
Variable pumping at Tracy PP (?)			ļ		, , , , , , , , , , , , , , , , , , , ,			
Hetch-Hetchy/South Bay Aqueduct	Moved to New	and Reopera	ted Storage					
Contributions from other CVP contractors		,	<u> </u>					
and other water users to meet enviro.								
objectives								
Recirculation			<u></u>					
Temporary storage of drainage water								
Desalination								
Expansion of Delta Cross Channel								
Central Delta intake			<u> </u>					
Fullerton circulation proposal			[
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Tool	IConsistent	Stakeholder	Assurances	Availability	Cost	Implement	Time	Mitigation
]			10001	Implement	Lune	į iviitigation į
	w/ CALFED	support	Potential	of funding		ability	Frame	potential

Procedural Tools

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Review upstream responsibility to reflect				
shifted CVP/SWP burdens since the Accord				
Section 1707: Dedication of instream flows				
for enviro. purposes and/or Delta outflow				
CVPIA yield augmentation				

Combination Tools

VAMP: modification of WQCP flows + acquisition of water through market and non-market means				
b(2)/b(3) water: Flexibility between the two to meet fish objectives				

Tool	Ecosystem Benefits	Water Supply Benefits	Water Quality Benefits
Market acquisition of water/incentives			
Purchase reduced demand			

Purchase reduced demand			
Long-term deals for long term water purch.			
Long-term deals for short term options			
Short-term purchase program			
Project water purchases			
Purchase USBR 215 water			
Purchase DWR interruptible water			
Purchase turnback water	-		
Purchase releases from hydro producers			
Time-based pricing			
Incentives for GW banking and exchange			
Acquisition of level 4 refuges supplies			
for banking			
Increased usage of Colorado R. water		·	
via conj. use or financial incentives			
Upstream purchases			
(w/ or w/o operational shifts)	1		

Tool	Ecosystem	Water Supply	Water Quality
	Benefits	Benefits	Benefits

New and reoperated storage

Delta Wetlands		
Los Vaqueros		
Madera Ranch		
Kern Waterbank:		
Reschedule SWP deliveries		
Pre-deliver to groundwater		
MWD GW banking / conj. use with local		
Districts		'
Alameda Co. GW banking / conj. use		
Semitropic expansion		
Mendota Pool pumping shifts		
Raise Friant Dam		
Raise Shasta Dam		
San Luis Reservoir (re-operation)		
Pine Flat companion reservoir		
Contra Costa GW banking/conj. use		
Expansion of Pacheco Res.		
CCSF / SCVWD Exchanges		
Removal of reservoirs/dams		
EBMUD Exchanges		
Amer. Riv. to SSJID/OID	ļ	Į.
Amer. Riv. to Mok. Riv.	Ì	1
Gravelly Ford Project (?)		
	- 1	_

Tool	Ecosystem	Water Supply	Water Quality
	Benefits	Benefits	Benefits

Modification of operating patterns

South Delta facilities (new screened intake			
with 5,000 to 7,000 cfs capacity at CCFB)			
Relax Banks pumping limits			
JPOD (ref. SWRCB alternatives)			
Expansion of flexible operations			
Exchanges not using Ops Group			
- unbalanced exchanges			
Exchanges for water quality			
Reschedule water or shifting to GW to			ļ
get past low point in San Luis			
Real-time operations with crediting			
(adaptive exports limits)			
Friant-Kern/ Calif. Aqueduct intertie			
Exchanges involving the Cross Valley Canal			
DMC / Calif. Aqueduct intertie	o	max. capacity is about 180AF/yr	
Variable pumping at Tracy PP (?)		man espacis, is about 1007 ii 757	
Hetch-Hetchy/South Bay Aqueduct			
Contributions from other CVP contractors			
and other water users to meet enviro.			
objectives			
Recirculation			
Temporary storage of drainage water			
Desalination			
Expansion of Delta Cross Channel			
Central Delta intake			
Fullerton circulation proposal			
			L

Tool	Ecosystem	Water Supply	Water Quality
	1		Traici Guanty
	Benefits	Benefits	Benefits

Procedural Tools

COA revisions

Review upstream responsibility to reflect		
shifted CVP/SWP burdens since the Accord		
Section 1707: Dedication of instream flows		
for enviro. purposes and/or Delta outflow		
CVPIA yield augmentation		

Combination Tools

VAMP: modification of WQCP flows +		
acquisition of water through market and		
non-market means		
b(2)/b(3) water: Flexibility between the two		
to meet fish objectives		

Tool	Ecosystem Impacts	Water Supply Impacts	Water Quality Impacts	Unresolved issues
Market acquisition of water/incentives				
Purchase reduced demand				
Long-term deals for long term water purch.				
Long-term deals for short term options	ł			ļ
Short-term purchase program	ļ			
Project water purchases				
Purchase USBR 215 water		1		
Purchase DWR interruptible water				
Purchase turnback water				
Purchase releases from hydro producers				
Time-based pricing				
ncentives for GW banking and exchange				
Acquisition of level 4 refuges supplies				
for banking			İ	
ncreased usage of Colorado R. water			· · · · · · · · · · · · · · · · · · ·	
via conj. use or financial incentives				
Jpstream purchases				
(w/ or w/o operational shifts)				

luna t-	Water Supply Impacts	1	Unresolved issues
			<u> </u>

New and reoperated storage

Delta Wetlands			
Los Vaqueros		<u> </u>	
Madera Ranch			
Kern Waterbank:	· · · · · · · · · · · · · · · · · · ·		
Reschedule SWP deliveries			
Pre-deliver to groundwater			
MWD GW banking / conj. use with local			
Districts			
Alameda Co. GW banking / conj. use			
Semitropic expansion			
Mendota Pool pumping shifts			
Raise Friant Dam		-	
Raise Shasta Dam			
San Luis Reservoir (re-operation)			
Pine Flat companion reservoir			,
Contra Costa GW banking/conj. use			
Expansion of Pacheco Res.			
CCSF / SCVWD Exchanges			
Removal of reservoirs/dams			
EBMUD Exchanges			
Amer. Riv. to SSJID/OID			
Amer. Riv. to Mok. Riv.			[
Gravelly Ford Project (?)			

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[Tool	Ecosystem	Water Supply	Water Quality	Unresolved
l .	1.	Trator Suppry	Traid: Galanty	TOTIL COOLACT
	Impacts	Ilmpacts	Ilmpacts	lissues
		Impaoto	Titibacia	lisanca

Modification of operating patterns

Courth Dolto facilities (see		y		
South Delta facilities (new screened intake	}			
with 5,000 to 7,000 cfs capacity at CCFB)				
Relax Banks pumping limits				
JPOD (ref. SWRCB alternatives)				
Expansion of flexible operations				
Exchanges not using Ops Group	ĺ			
- unbalanced exchanges				
Exchanges for water quality				
Reschedule water or shifting to GW to				
get past low point in San Luis				
Real-time operations with crediting				ſ
(adaptive exports limits)				
Friant-Kern/ Calif. Aqueduct intertie				ł
Exchanges involving the Cross Valley Canal				
DMC / Calif. Aqueduct intertie	+ (could offset impacts), o (could req. mitigtn)	l +	+	relation to JPOD
Variable pumping at Tracy PP (?)	(count once impacto), o (count rod. magary		•	relation to JPOD
Hetch-Hetchy/South Bay Aqueduct			,	
Contributions from other CVP contractors				
and other water users to meet enviro.		j		
objectives				
Recirculation				
Temporary storage of drainage water				
Desalination				
Expansion of Delta Cross Channel				
Central Delta intake				
Fullerton circulation proposal				
			<u> </u>	<u></u>

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	Tool	Ecosystem	Water Supply	Water Quality	Unresolved
			Trator Cuppiy	Trace Quality	Officsolved
		Impacts	Impacts	Impacts	issues
				paoto	100000

Procedural Tools

COA revisions

Review upstream responsibility to reflect		
shifted CVP/SWP burdens since the Accord		
Section 1707: Dedication of instream flows		ļ
for enviro. purposes and/or Delta outflow		
CVPIA yield augmentation		

Combination Tools

VAMP: modification of WQCP flows +		
acquisition of water through market and	ļ	
non-market means		
b(2)/b(3) water: Flexibility between the two		
to meet fish objectives		